SELECTED PARAS CONCERNING SURVEY AND SETTLEMENT OPERATIONS IN DARBHANGA DISTRICT (1896 to 1903)

By

J. H. Kerr, I.C.S.

I

General Description of the District

PAGE 1, PARA 1 :

Early History :—

Considering the present position of the Darbhanga District as the headquarters of Maithila Brahminism, singularly little is known of its early history prior to the Muhammadan period. The 'Ramayan' contains a few references to localities which local patriotism identifies with some existing villages in Benipatti thana, chief among them Chiuta, which is said to have been the abode of Ahilya, the wife of Gautama Rishi, who was turned into stone by her husband's jealous harshness and restored to life by Rama. But no reference is found to any......in the district in the more authentic records of Buddhism, and it seems it has been left unvisited by the Buddhist pilgrims, who traversed a large.........in the fourth and sixth centuries of the Christian era. Nor is it............with regard to Darbhanga, from the history of the Pala and............such scanty information as is obtainable in regard to...........There can be little doubt that upto the 12th or 13th.........a backward tract, and that its development ....Braj, omos, and of the leaders of Brahminism

PAGE 1, PARA 2

The Darbhanga Raj :—

The oldest known............Darbhanga is a grant dated 1400 A.D., conveying village of Bisfi in Benipatti Thana to the poet Vidyapati, who flourished in the reign of Raja Shiva Singh, and made the latter the best known of all the Hindu Rajas of Maithila. Probaly the oldest family in the districts is that of the Raja of Dharaur, which flourished long before the English occupation, but is now in very reduced circumstances. At the present day, however, the only landholders of any historic importance is the Maharaja of Darbhanga, whose family is descended from one Mahesh Thakur, who is said to have come from Jabalpur about the begin-

ning of the sixteenth century. He took service as a priest with the descendants of Raja Shiva Singh, who still exercised a nominal supremacy in Tirhut, but as they collapsed before the advancing Muhammadan power, Mahesh Thakur managed to get Akbar to confer upon him the grant of what are now the Darbhanga Raj Estates. During the Muhammadan period, Mahesh Thakur and his descendants gradually consolidated the power of the family both in agrarian and in social matters, and though, owing to recusancy at the permanent settlement, Raja Madho Singh was for some time deprived of a portion of his property, the British Government eventually recognised him. During the first half of the last century, owing the mismanagement and litigation, the estate fell into considerable difficulties. But the litigation had the effect of deciding once for all that the estate was impartible and that the inheritance to it was regulared by primogenture, and owing to a long minority of over 20 years from 1860 onwards, during which the estate was under the Court of Wards, it is now in a very flourishing condition. It may be noted that Darbhanga has been the head-quarters of the family since 1762 only. Prior to that date they resided at Madhubani.

PAGES 6-7, PARA 16 :

Rainfall: —

Although there is a certain amount of irrigation in the north of the district, the main sources of supply are tanks and streams, which are apt to fail in a dry season when most wanted. The district, therefore, like the rest of North Bihar, is dependent for its prosperity on seasonable rainfall. The normrl rainfall of the district, given in the Collector's report on the famine of 1897 is shown in the following statement :—

Rainfall	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Sadar	.53	.43	.29	.69	2.58	7.92	11.89	11.39	9.58	2.99	.06	.17
Madhu-bani ...	.74	.39	.39	1.01	2.96	8.59	10.69	10.51	10.17	2.62	.03	.08
Samasti-pur ...	.64	.38	.23	.36	2.35	7.58	12.19	10.35	8.01	3.16	.09	.08
Distt. average...	.64	.40	.30	.69	2.63	8.03	11.59	10.75	9.25	2.92	.06	.11

	Total	Distt. average
Sadar	48.52	47.37
Madhubani	48.18	
Samastipur	45.42	

PAGE 8, PARA 22 :

Railways :—

The district is, on the whole, well off in the matter of railway comunications. Samastipur and Dalsinghsarai Thanas are traversed by the main line of the Tirhut State Railway, which enters the district just below Dalsinghsarai and runs through Samastipur to Waini, a distance of 29 miles. The southern part of this area also contains 25 miles of the new chord line of the Bengal and North Western Railway from Hajipur to Bachhwara, which runs parallel to the Ganges embankment from east to west. From Samastipur a line runs to Darbhanga and there branches off in two directions, the first north-west to Sitamarhi through Kamtaul and Jogiara, and the other due east to Khanwa Ghat on the Kosi. The total length of the line within the district is 146 miles. The parts of the district, most in wants of railway communication, are the south-east and the Madhubani subdivision. It has long been proposed to construct a line from Sakri to Jainagar on the Nepal Frontier, and most of the earth-work was completed as a relief work during the famine of 1897, but the project has not yet been carried out. There can be no doubt that such a line would be of great utility. Not only would it pass the important town of Madhubani but it would also secure a large share of the Nepal Frontier traffic. The number of rivers in the south-eastern part of the district is likely to prove an obstacle to the extension of railway communication to that area for many ways to come.

PAGE 8, PARA 23 :

Telegraphs :—

............to the railway telegraph system, there are wires from Sakri to Madhubani and Rajnagar, a distance of 20 miles ; from Nirmali to Naraya (6 miles), and from Samastipur to Rusera (18 miles).

PAGE 8, PARA 26 :

Markets

The most important marts are the district and subdivisional headquarters, Darbhanga, Samastipur and Madhubani. Naraya in Phulparas Thana is an important centre for the Nepalese grain traffic. Rusera, owing to its position on the Gandak, was at one time the largest market in the south of the district, but it has somewhat lost its importance since the opening of the railway, though it has still a flourishing bazar. The other markets in the district are mainly of local importance.

PAGE 9, PARA 27 :

Roads :—

The district contains 1,734 miles of roads, or a little more than half a mile of road to every square mile of superficial area. Particulars are given in the annexed statement : —

Number of class.	Description of class.		Mileage.
I A	Metalled, bridged and drained ...	...	23
I B	Do., partially bridged and drained	...	112
II A	Unmetalled, bridged and drained	...	329
II B	Do., partially bridged and drained	...	553
	Village roads	...	717
		Total...	1,734

PAGE 9, PARA 28 :

Many of the roads in the low lying tract in the central and south-eastern part of the district are impassable during the rains, and this area is undoubtedly in lack of good communications. It must, however, be confessed that the matter is one of considerable difficulty. The nature of the country is such as to render high enbankments a necessity. These are expensive to maintain in repair and are frequently breached in time of flood. To avoid this, an enormous amount of bridging would be necessary. Much has, however, been done in recent years to improve communications by the erection of five pontoon bridgest at different points on the Gandak and the Bagmati. The road from Darbhanga to Jainagar on the frontier, which crosses all the rivers in the west of the Madhubani Subdivision, has been completely bridged throughout, at the cost of the Darbhanga Raj. In Samastipur, where the Country is high, comparatively little embanking or bridging is required, and most of the roads are in good order, and communications are open at all seasons of the year.

II

Population

PAGE 9, PARA 30 :

Population at the Permanent Settlement :—

The earliest recorded estimate of the population was made at the time of the Permanent Settlement in 1793, and was based upon enquiries made during the preceding years for revenue-paying and for revenue-free lands separately. The result for the whole district of Tirhut, correspon-ding with the present districts of Muzaffarpur and Darbhanga, was to

show a population of 1,844,310 persons only, or less than a third of the conbined populatiion of the two districts at present. Though the 1793 figures were probably an under-estimate, like all those which were arrived at before the first proper enumeration of 1872, nevertheless there can be no doubt that an enormous increase has taken place within the last century, and that the population must have at least doubled itself within that time.

PAGES 9-10, PARA 31 :

Growth of Population in the 19th century :—

In 1802 the Collector estimated the population of the district as two million souls, but an estimate made by the Revenue Surveyor in 1846 returned only 1,637,545 persons. This estimate was, however, based on the number of houses and as the enumeration of the houses was admittedly imperfect and incomeplete, little reliance can be placed on the figures. During the next quarter of a century, estimates of the population fluctuated from 1,800,000 to 1,500,000 but the first really systematic census of 1872 showed their inadequacy as it returned a total population of 4,384,706 persons giving a density of 691 persons to the square mile. At the Census of 1901 the average density of the population of Muzaffarpur and Darbhanga combined was 928 persens to the square mile, so that there has been an increase of over 30 per cent in the last 30 years.

PAGES 10, PARA 32 :

The Enumeratian of 1874 :—

There can, however, be litttle doubt that some parts of the increase must be ascribed to defective numeration in 1872, for a second test census of the Darbhanga Subdivision made in 1874 by the agency employed on famine relief, showed that the population was greater by 13 per cent than that returned in 1872. The figures for 1881, when the first census of Darbhanga as a separate district took place, also supply the first really trustworthy starting point for guaging subsequent variations in the population of the district.

Final Report on the Survey and Settlement Operatins in Darbhanga District (1896 to 1903)

PAGE 2, PARA 3 :

The District Name :—

The district of Darbhonga takes its name from its chief town. The derivation of the name throws little light on early history. Local pat-

riotism insists that Darbhanga is derived from "dar-i-bangal" meaning the door of Bengal, but this is probably etymologically impossible and is certainly meaningless, for the division between Bengal and Bihar has always lain much further east. It seems probable that Darbhanga must be content to lake its name from one Darbhangi Khan; a Muhammadan free-booter, concerning whom little or nothing is known.

PAGE 10, PARA 33 :

The following table indicates the variations of the population of the district, thana by thana, during the last 20 yeans :—

S. No.	Name of thana.	Total population.			Percentage of variation;	
		1881.	1891,	1901.	1881-1891	1891-1901
	Madhubani sub-division					
1.	Benipatti ...	247,2888	244,815	266,431	- 1.0	+ 8.83
2.	Khajauli ...	177,994	228,990	247,329	+ 8.6	+ 8.01
3.	Phulparas ...	267,500	296,666	326,964	+ 10.9	+ 10.91
4.	Madhubani ...	211,772	244,229	253,655	+ 15.3	+ 3.86
	Total—	904,554	1,014,700	1,094,379	+ 12.0	+ 7.85
	Darbhanga sub-division					
5.	Darbhanga ...	403,519	441,452	435,553	+ 9.3	- 1.36
6.	Bahera ...	309,875	345,559	355,024	+ 11.5	+ 2.74
7.	Rusera ...	256,605	261,795	275,118	+ 2.0	+ 5.09
	Total—	969,999	1,048,806	1,065,595	+ 8.0	+ 1.60
	Samastipur sub-division					
8.	Warisnagar ...	169,946	170,992	169,055	+ 0.6	- 1.13
9.	Samastipur ...	306,493	305,181	311,312	- 0.3	+ 2.00
10.	Dalsinghsarai	279,504	262,276	272,270	- 6.1	+ 3.81
	Total—	755,943	738,449	752,637	- 2.3	+ 1.92
	Grand Total—	2,630,496	2,801,955	2,912,611	+ 6.5	+ 3.95

PAGE 11, PARA 37 :

The Census of 1901 :—

Taking the district as a whole then, we find that the population of Samastipur is practically stationary, that the Sadar is fast approaching a similar condition, and that it is only in Madhubani that any considerable increase is to be found, and that even here the rate of progress was appreciably less during the last decade than at any previous period. Nor can these phenomena be ascribed to any special cause, such as famine or plague. Plgue may, indeed, have affected the population of the Dalsinghsarai and Darbhanga thanas, but its effect has been slight; for Madhubani, where Plague has not yet found an entrance returns a higher death-rate than any other part of the district; and as to famine it is sufficient to point out that the rise in population is greatest in Madhubani, which was most widely affected by the crop failure of 1896, and least in Samastipur, in which two thanas were hardly affected at all. To quote from the Census Report of 1901 : "The fact seems to be that while the other parts of the district have as dense a population as the lad will support there is still some room for expansion in Madhubani : "and this proposition receives further corroboration when the fiigures for density of population in each subdivision are further examined as in the following statement :—

Subdivision.	Density per square mile according to the Census Report.	Density per square mile excluding the urban populatian and the nonsettled area.	Percentage to the total area of—			Average rent per acre.		
			Cultivated area.	Culturable area but not cultivated.	Unculturable area.	Rs.	As.	P.
Madhubani	811	800	79	11	10	3	12	2
Sadar	872	811	79	12	9	3	10	9
Samastipur	985	1,001	83	9	8	3	15	4
Distt. Total.—	873	849	80	11	9	3	12	4

PAGE 13, PARA 42 :

***Distribution of Population by Religion* :—**

Nearly 88 per cent of the population are Hindus and 12 per cent are Muhammadans. The number of persons belonging to other religions

is only 792. The proportion of Muhammadans is highest in Darbhanga Thana where they form over a fifth of the total population, and lowest in Dalsingh Sarai, where they form little more than a twentieth of the total population. There has been no important variation in the proportion of Hindus to Muhammadans during the last decade.

PAGE 14, PARA 49 :

The District of Tirhut

The present district of Darbhanga was not formed till 1875. Before that date, together with the present district of Muzaffarpur, it formed the large district of Tirhut. In Chapter IV, Part I of the final report on the operations in Muzaffarpur, Mr. Stevenson-Moore has given a full account of the early Land Revenue Administration of the district of Tirhut in general, and of the present district of Muzaffarpur in particular. This chapter will deal only with that part of the old district of Tirhut which is now known as Darbhanga.

The Muhammdan Period

PAGE 15, PART 51 :

The early Hindu Administration

The history of the district, prior to the reign of Akbar at the close of the 16th century, is lost in obscurity. Up to about 1530 A. D., it formed a part of the great Hindu Kingdom of Mithila, but soon after that date, it came with the rest of Bihar, more or less under Muhammadan supremacy. No details are available as to the Hindu system of administration, but it was doubtless based on the laws of Manu. The chief features seem to have been the prevalence of produce, rents and abwab, and the absence of all detailed information or enquiry as to the areas and capabilities of the tracts rendered liable for the revenue. The oldest document in the district deals with the grant of a village in Benipatti Thana to the poet Vidyapati by Raja Shiva Singh. Its date is about 1400 A. D., and though some attempt is evidently made at pecision in the description of the tract concerned, all that can be said about it is that it was "a village on the bank of Baghmati, known as Bisapi, upto its borders with much cultivated lands of wide extent, watered by rivers, endowed with woods and tanks". It is not until the assessment made by Akbar's Finance Minister, Todar Mull, in 1582, that any authentic details as to the district and its capabilities are available, and this brief account of its revenue history may well begin with a short description of this great reform.

PAGE 17, PARA 58 :

The variations of the revenue roll, between the acquisition of the Diwani in 1765 and the decennial settlement of 1790, are of little interest, except as illustrating the defective system of administration described above. The gross revenue of Tirhut rose from Rs. 8,20,042 at Mohammad Raza Khan's revision in 1765, to Rs. 8,51,829 in 1787. The oldest Register in the Darbhanga Collectorate is that compiled by Nawab Hushiyar Jang in 1773. This shows, for the 45 parganas comprising the present district, a revenue of only Rs. 1,39,713 levied from 2,005 asli and 1,795 dakhli villages, but no details of area or incidence are given. The revenue, however, does not apparently include the income from Jagir lands and other payments appropriated by middlemen.

The Resumption Proceedings

PAGE 22, PARA 75 :

Revenue-free Lands :—

The prevalence of revenue-free properties in Tirhut was very marked from the earliest times. During the Hindu period, the granting of lands for charitable and religious purposes was very common. The Ain-i-Akbari contains no details on the subject, but Akbar's assessment touched only 1,277 square miles out of the 6,114 in the whole area now forming the districts of Muzaffarpur and Darbhanga. Even assuming that two-thirds of the tract was then uncultivated, it is obvious that a large part of the cultivated area must have escaped assessment altogether. During Muhammadan rule, the remoteness of the district from the centre of the Mughal power rendered it easy for the subordinate officials of the Empire to carve out for themselves Jagirs and Nankars. And to such an extent had this practice grown that, as we have seen, at the final Muhammadan assessment of 1765, out of a total demand of less than eight lakhs of rupees more than five lakhs was retained by Jagirdars and other revenue-free holders and never reached Govt. at all, the chief offender being the officer incharge of the assessment, who secured to himself properties yielding a revenue of nearly a lakh and a half of rupees. In declarlng the decennial settlement to be permanent in 1793, the Governor General in Council reserved the right "to impose such assessment as he may deem equitable on all lands at present alienated and paying no public revenue, which have been, or may prove to be, held under illegal or invalid titles." In view of the previous history of the district it is not surprising that the effects of the resumption proceedings on the revenue roll of Tirhut were almost as important as those of the permanent

settlement, and as the resumption was carried out with much more care than the permanent settlement, it proved to be a task of even greater magnitude.

PAGE 10, PARA 35 :

In the Sadar Subdivision, only Darbhanga thana shows an actual decline of population in the last decade, but this is due to the fact that fortuitous circumstances caused a large number of non-residents to be present in Darbhanga town during the census of 1891. Excluding the urban area, the Darbhanga thana shows a slight increase of less than a half per cent during the period from 1891 to 1901. Taken as a whole, the most striking feature of the Sadar Subdivision is the sudden arrest in the rise of population, which has taken place since 1891.

PAGE 35, PARA 131 :

Survey of Municipalities :—

There are four Municipalities in the district, Darbhanga, Samastipur, Madhubani, and Rusera. These were dealt with in accordance with the orders of the Board No. 477 A, dated 4th April 1893. The agricultural portions were surveyed in the ordinary course, and a record of rights prepared for them. The Rusera Municipality cauld not afford to pay for a detailed map of its urban area, covering about 350 acress, and this was consequently only surveyed topographically on the 16" scale. The other three Municipalities agreed to pay for a detailed survey and record-of-occupancy. Their urban areas were surveyed on the scale of 64 to the mile, and a wall map for the entire municipal area, on the scale of 16" to the mile was prepared, one serial number being maintained throughout, corresponding with that of the record-of-occupancy. This document, which was prepared primarily for the purposes of municipal assessment and administration, contains the following columns in Darbhanga and Madhubani :—

(1) Serial number of plot.
(2) Name of proprietor, with parentage, cast, and residence.
(3) Name of intermediate Iandlord, with parentage, & c.
(4) Name of sub-landlord, with parentage, &c.
(5) Name of actual rent-receiver, with parentage, &c.
(6) Name of occupant, with parentage, &c.
(7) Area of plot in acres.
(8) Area of plot in bighas.
(9) Description of plot, i.e. whether pukka or kacha house, road, tank, garden, &c.

(10) Remarks.

The record-of-occupancy of Samastipur Municipality does not contain columns 2,3, and 5, which were subsquently added a|to the suggestion of Mr. Wheeler, Collector of Darbhanga, to provide for the greater subinfeudation of proprietary interests which is found in Darbhanga and Madhubani.

PAGE 59, PARA 21 :

Darbhanga was the most litigious thana in every respect. It accounts for the largest number of objections, or over a fifth of the total. It has also the highest average of objections per square mile, and an objection was raised to nearly one khatian in every ten. The area is mainly held by petty proprietors, in whose estates the greatest confusion about rents and possession was found at attestation. No less than 75 per cent of the rents were disputed at that stage, and more than half of the objections filed related to this matter. Another cause of the large number of objections is undoubtedly the fact that the thana contains the head-quarters station. It is invariably found that facility for obtaining legal advice tends in a very high degree to increase litigation of all kinds during settlement proceedings. The two thanas marked by the highest proportion of objections after Darbhanga are Bahera and Rusera, where the conditions are very similar, except as regards proximity to head-quarters. The thanas with the smallest proportion of objections are Warisnagar, Dalsingh Sarai, Phulparas, and Khajauli. In the two former the chief landlords are indigo factories who are on good terms with their raiyats. The greater part of Phulparas belongs to the Maharaja of Darbhanga, and in the area, for which a record was prepared by Mr. Finucane, there were, as has already been stated, very few disputes of any kind. Khajauli is mainly covered by the Rajnagar Circle of the Darbhanga Raj, and though the rents recorded as payable at attestation were pruned of illegal enhancements, the Raj apparently felt that it would be useless to challenge our action under section 103 A, and only filed objections in a few cases where there had been mistakes of calculation.

III

Statistics

PAGE 78, PARA 284 :

The total Area of the District :—

The total area of the Darbhanga district, as obtained from a summation of the areas of the village surveyed during the preseat opera-

d at
iris-
.

iare
iles.
,303

5

35

5
348

wer
and
but
was
ivi-
lish
iles,
ver,
age
rict
res,
nga
Ma-
also
ard
een

tle-
l be

analysed subsequently. Holdings are composed of plots, of which over $5\frac{1}{2}$ millions were entered in our records, the average size of a plot being about two-fifths of an acre, or much the same as in Muzaffarpur.

PAGE 79, PARA 289 :

The Samastipur subdivision contains the smallest average units and Madhubani the largest. This doubtless indicates greater agricultural pressure in the south of the district, but differences in soil and in land-holding interests are also responsible for a good deal. The north of the district contains large stretches of paddy land, which always mean large plots and also large villages, as village sites are few and far between in such an area. The south, however, is almost entirely upland, which is highly cultivated in minute plots, and it is held by a large number of petty proprietors; whereas the north mainly belongs to one big landlord, the Maharaja of Darbhanga, and such a condition will always tend against excessive subdivision of units, be they villages, holdings or plots.

PAGE 80, PARA 290 :

The Statistical Statements :—

During the present operations, six main statistical statements were compiled, and these will now be analysed and discussed. They consist of :—

(1) the milan khasra or khasra abstract giving details regarding the cultivated and uncultivated area;
(2) the crop statement, also compiled from the khasra;
(3) the agricultural stock statement, written up for each village by the amin during the preliminary record-writing;
(4) an abstract of the record-of-rights and rents compiled in the settlement office, while the record is being prepared for final publication;
(5) statistics of transfers of proprietary rights, compiled for selected villages during attestation;
(6) Statistics of transfers of occupancy rights, compiled during attestation for all villages.

PAGE 80, PARA 291 :

The Area covered. :—

A few words of explanation are required regarding the areas covered by these. The total area of the disttict is 3,348 square miles, but of this 45 square miles was excluded from operations under Chapter X of the Bengal Tenancy Act. Of the excluded area 40 square miles consist

The crop

Th

in the follo

Sl. No.	
1.	Da
2.	Mu
3.	Sa
4.	Ch
5.	Ga Go
6.	Mo est

of shifting lands in the Gangetic diara, and 5 square miles cover the urban portions of the four municipalities in the district. Of the diara area, however, five square miles containing Government and temporarily-settled estates, was cadastrally surveyd, and khasras were written up for it. Agricultural statistics were, therefore, compiled for this area. For the remaining 40 square miles of diara and urban areas there are no statistics. The first three statements, therefore, which refer wholly to agricultural matters, deal with an area of 3,308 square miles. The remaining statements, which are derived from the record-of-rights itself, cover only rhe area for which the record was prepared, or 3,303 square miles.

PAGE 80, PARA 292 :

Comparison with other Districts :—

It will be seen that Darbhanga has a larger cropped area than any other districts in North Bihar, and that the proportion borne by this to the total area is as large as in Muzaffarpur and larger than in Saran. It must be remembered, however, that both Muzaffarpur and Saran contain large diara tracts of sand and water which go to swell the proportion of the uncultivated area, whereas Darbhanga has comparatively little diara area. But in any case it is clear that in Darbhanga, as in the other districts of North Bihar, except Champaran, there is very little room for extension of cultivation.

PAGES 80-81, PARA 294 :

The preponderence of the Aghani area in Darbhanga :—

Probably the most remarkable feature about Darbhanga is its dependence on the aghani harvest, no less than 63 per cent of its cropped area being under crops of this kind. Moreover, as will be seen from the crop statistics, more than eight-ninths of the Darbhanga aghani area is under winter rice. The proportion of the cropped area under aghani is much greater in Darbhanga than in any other district in Bihar, and it is no exaggeration to say that Darbhanga, apart from a limited area in the south, is mainly dependent for its prosperity on the winter rice crop. This factor, therefore, will be found essential to a right understanding of the agricultural condition of the district.

PAGE 8l, PARA 295 :

Owing to the predominance of the aghani crops in Darbhanga, the bhadai and rabi areas show a corresponding contraction. The area twice cropped is also considerably smaller than in Muzaffarpur. The lands devoted to winter rice never bear a second crop of any considera-

ble value. On the other hand „Darbhanga shows a larger irrigated area than any other district of North Bihar except Saran. In the latter, however, wells are the chief source of irrigation, which is mainly employed for the rabi crops, while in Darbhanga four-fifths of the irrigated area is under winter rice, and lies mainly in the north of the district, were tanks and streams are largely used as sources of irrigation.

PAGE 81, PARA 297 :

Madhubani thana has the largest uncultivated area, but this is mainly due to the large extent of mango groves in this thana. The uncultivated area in both the Sadar and Madhubani subdivisions is slightly above the district average, but in Samastipur it amounts to only 17 per cent, inspite of the fact that in the diara area shown as excluded, the proportion rises to nearly 35 per cent. If the 35 square miles of topographically surveyed area in this subdivision were included in the total, the proportion of uncultivated area would be about the same as the district average, as the diara area is practically all uncultivated. As it is, however, also unculturable, the fact remains that there is smaller room for extension of cultivation in Samastipur than in any other parts of the district.

PAGES 81-82, PARA 298 :

Current Fallow :—

It may appear somewhat remarkable that Samastipur under the circumstances shows a higher proportion of current fallow than Madhubani, but the reason is that agricultural conditions of the two subdivisions are radically different. Samastipur, as a whole, is marked by the careful cultivation of its rich high uplands. Such lands require occasional rest, and the cultivators are intelligent enough to understand the advantage of allowing it to them. But in Madhubani the lands are mainly low and produce but one crop in the year, and so the necessity for high cultivation does not arise. In a year of good rainfall, no one would think of leaving rice lands fallow, and, indeed, rice lands positively deteriorate when left uncultivated. As pointed out by Mr. Finucane in the final report on the Alapur settlament, rice lands when allowed to go out of cultivation "become backed and hardened, the ails or partitions between fields become broken, and the drains by which the land was irrigated, get filled up or obliterated. The cost of cultivating such lands is, therefore, large, and raiyats will not pay anything like the original rent for it. As they express it, the land has gone out of repair (be-maramat), and it takes time and labour again to bring it into repair."

Subdivisional total :—		475,403	18,338	15,321	4,841	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL :—	Settled ...	2,113,829	104,456	85,032	23,572	213,060	5.0	4.0	1.1	10.1
	Excluded ...	3,101	94	1	310	405	3.0	0.1	10.1	13.1
	TOTAL ...	2,116,930	101,550	85,033	23,882	213,465	5.0	4.0	1.1	10.1

The

total

of th

Sl. no.

1.
2.
3.
4.
Sub
5.
6.
7.
Sub
8.
9.
10.

Tot
Sub
sion
tota
Sub
Dis

PAGE 82, PARA 300 :

Old Fallow :—

Half of the area under discussion, equivalent to one-twentieth of the total area of the district, is waste land, pure and simple. Much of it is impregnated with the salt efflorescence known as reh, and is unfit for cultivation in its present state, but in a district such as Darbhanga, where the cattle mainly depend upon grazing and get little other food during the greater part of the year, it would probably be impossible to reduce the area of waste land to any appreciable extent. As it is old fallow covers less than five per cent of the total area in all thanas, except those of the Sadar subdivision, which contains a considerable amount of swamp and marsh, which is under water for the greater part of the year and is useless for grazing purposes.

PAGES 82-83, PARA 301 :

Mango Groves :—

The large area under mango groves, especially in the north of the district, adds, however, to its grazing resources. In Madhubani thana particularly, the mango states constitute a most valuable agrlcultural asset. This area is the strong of Brahminism in the district and many of the groves have been planted from religious motives. Culturable jungle is chiefly found in Madhubani subdivision, along the banks of streams and on the Nepal frountier. There is also a considerable area of it in the small diara tract for which statistics are available.

PAGE 83, PARA 303 :

Water :—

The most important item is water, which covers 4 per cent of the total district area. The proportion is lowest in Samastipur subdivision, the greater part of which is separated from the rest of the district by the Burhi Gandak river, and which itself contains no rivers of any importance. Further north, however, we find a network of rivers and streams, most of which converge on the extreme south-east corner of the district. It must be remembered that Dalsinghsarai thana contains 35 square miles of Gangetic diara which is not included in these figures.

PAGE 83, PARA 304 :

Miscellaneous, Roads, &c. :—

The miscellaneous uncultivated area consists mainly of roads and the banks of rivers, except in Dalsingh Sarai, where a few sandy tracts in

The

Sl. No

1.
2.
3.
4.

5.
6.
7.

8.
9.
10.

Dal
Sub

Old Fa

the tota
is impre
cultivat
where th
during
reduce
fallow c
those o
of swam
year and

Mango G

T
the distri
particula
asset. Th
the grov
is chiefly
ams and
in the sm

Water :—

Th
total distr
the great
Burhi Gan
tance. Fu
most of w
It must be
of Gangeti

Miscellane

Th
the banks

the diara are included. Apart from this thana, there are no important variations from the district average. House sites are classified separately. They account for nearly one and a half per cent of the total area of the district. The variations from the district average are nowehre significant, except in the small diara area where, as was to be expected, house sites cover a very small proportion of the total area.

PAGES 87-88, PARA 319 :

The Harvest :—

In Darbhanga, as in the rest of Bihar, the crops fall under one or other of the three main harvests, bhadai, aghani and rabi, or autumn, winter and spring. The thanawar distribution of the cropped area is shown in the following statement :—

S. No.	Name of Thana.	Cropped area							Twice Cropped		
		Bhadai		Aghani		Rabi		Total			
		Area in acres.	Percentage to net cropped area.	Area in acres.	Percentage to net cropped area.	Area in acres.	Percentage to net cropped area.		Area in acres.	Percentage to net cropped area.	Total net cropped.
1.	Benipatti	24,922	18	97,556	71	95,471	69	217,949	81,283	59	136,666
2.	Khajauli	47,673	28	110,098	65	77,683	46	235,454	68,456	40	166,998
3.	Phulparas	39,999	17	191,188	81	85,163	36	316,350	82,584	35	233,766
4.	Madhubani	37,881	25	98,835	67	66,622	45	203,338	57,411	39	145,927
	Subdivisional Total...	150,475	22	497,677	72	324,939	47	973,091	289,734	42	683,357

1	2	3	4	5	6	7	8	9	10	11	12
5.	Darbhanga	59,064	27	132,046	61	130,133	61	321,225	108,059	50	213,106
6.	Bahera	51,138	22	164,154	72	87,690	38	302,982	77,894	34	225,088
7.	Rusera	44,828	25	109,374	62	73,803	42	228,005	52,391	29	175,614
	Subdivisional Total...	155,012	25	405,574	66	291,626	47	852,212	238,344	38	613,868
8.	Warisnager	42,254	40	48,698	46	50,172	47	141,124	36,209	34	104,915
9.	Samastipur	65,532	41	67,247	42	67,001	42	199,780	41,878	26	157,902
10.	Dalsinghsarai	54,257	41	40,743	31	66,967	51	161,967	31,589	24	130,378
	settled Excluded	1,157	57	157	7	1,214	60	2,528	505	24	2,023
	Dalsinghsarai Total...	55,414	41	40,900	30	68,181	51	164,495	32,095	24	132,401
Sub-divisional	Settled ...	162,043	41	156,688	39	184,140	46	502,871	109,676	27	393,195
	Unsettled ...	1,157	57	157	7	1,214	60	2,528	505	24	2,023
	Subdivisional Grand Total ...	163,200	41	156,845	39	185,345	46	505,399	110,181	27	395,218
	District Total Settled ...	467,530	27	1,059,939	62	800,705	47	2,328,174	637,754	37	1,690,420
	Excluded ...	1,157	57	157	7	1,214	60	2.528	505	24	2,023
	Total ...	468,687	27	1,060,096	62	801,919	47	2,330,702	638,259	37	1,692,443

PAGE 88, PARA 320 :

Predominance of the Winter Harvest :—

The predominance of the winter harvest in Madhubani and Sadar subdivisions is very marked, and exceeds the proportion found in any thana or subdivision of Muzaffarpur or Champaran. As will be seen, winter rice is the chief crop grown in these subdivisions and this account for the small area under crops of the autumn harvest, for which also the tract is unsuited owing to its liability to floods. In phulparas no less than 81 per cent of the net cropped area is under aghani crops. The rabi proportion is fairly constant throughout the district, but it would be a fallacy to suppose that this indicates equality of conditions, so far as the spring harvest is concerned. For a gain of inconsiderable value or a thin catch crop of gram or linseed. It is only from bhadai lands that a rabi crop of any value can be reaped, and so the rabi crop is mainly of importance in Samastipur where the bhadai and rabi are as approximate.

PAGE 88, PARA 321 :

Liability to Famine :—

Mr. Stevenson-moore, in paragraph 721 of the Muzaffarpur final report, throws out the interesting suggestion that "by adding the bhadai and rabi percentages of area and deducting the aghani, we get a fairly correct measure of agricultural prosperity." This method of calculation, however, as applied to Darbhanga would yield untrustworthy results, for accordiug to it, the subdivisions would stand in the following order :—

Samastipur	+48
Sadar	+ 7
Madhubani	− 3

There is not, as a matter of fact, such a difference between the material condition of Samastipur and the rest of the district as these figures would seem to indicate. But the test suggested by Mr. Stevenson-Moore does indicate approximately, the areas which are likely to suffer most severely in the case of a failure of the winter rice crop, which is the main, if not the only, cause of famine in Bihar. As, however, failure of the winter rice is fortunately not the normal state of things, it would be unsafe to judge of the ordinary condition of an area by its liability to distress in extraordinary years. The matter will be further discussed in dealing with the material condition of the people. It is of course a truism, that an area, which depends mainly on one crop, will suffer more severely from the failure of the crop than another area, which has several

alternative crops to fall back upon, all of which are highly unlikely to fail in the same year.

PAGE 88, PARA 322 :

The Twice-cropped Area :—

In ragard to the twice-cropped area, the same caution applied as in this case of rabi. A high proportion of twice cultural prosperity or of ability to withstand the effect of drought. For instance, the largest proportion of twice-cropped lands in Darbhanga is in the Madhubani Subdivision, where 72 percent of the net cropped area is under winter rice and most of the second crops must, therefore, be of inconsiderable value. Phulparas, with 81 percent of its net cropped area under winter rice, has 35 per cent twice-cropped, or a larger proportion than the Samastipur subdivision, in which area, mainly, really valuable bhadai and rabi crops are produced in the same year from the same land.

PAGE 89, PARA 324 :

The Irrigated Area in Madhubani :—

The most remarkable feature of this is the prevalence of irrigation in the Madhubani subdivision, as compared with the rest of the district. This is probably due in part to the fact that this area was the last in the district to be surveyed and that greater attention was paid to the compilation of irrigation statistics there than in the area surveyed in the earlier days of the operations. It was found that the amins, if left to themselves, only reeord as irrigated, plots which are actually being irrigated at the time of survey, and as this takes place in the cold weather, there is a danger of the record of the irrigation of the more important crops being omitted; altogether. Special instructions regarding the matter were, therefore, issued during the progress of the work in Darbhanga and these resulted in the irrigation statistics being more complete in the north of the district than the south. But even allowing for this, there can be no doubt that irrigation is much more largely practised in the north than in the south, and there are several reasons why this could be so.

PAGES 89-90, PARA 325 :

The Sources of Irrigation :—

It will be noticed that, in Samastipur subdivision wells are the main source of irrigation, while in Madhubani and the Sadar, their place is taken by tanks and "other sources" (chiefly rivers and streams) which together water over 95 per cent of the irrigated area, the area irrigated from wells being insignificant. The numerous streams and rivers, which

Irrigati

Ir

irrigatio

Sl. No.	Na
1.	Beni
2.	Kha
3.	Phul
4.	Mad
Subdivisio	
5.	Darl
6.	Bahe
7.	Ruse
Subdivisio	
8.	War
9.	Sam
10.	Dals
Dalsinghs	
Subdivisio nal Total	
Subdivisio	
District Total	

run through Madhubani, are very largely taken advantage of for the irrigation of winter rice, especially in the Khajauli and Phulparas. In Benipatti, in which nearly a third of the cropped area is shown as irrigated, a very complete system of channels and pynes or cuts from the Kamla river, constructed at small cost by the energy and foresight of Mr. R. S. King, Sub-Manager of Rahika Circle of the Darbhanga Raj, during the famine of 1897, was the means of saving 30,000 acres of winter rice during the partial failure of the monsoon, in 1901. And all over the subdivision, tanks are very largely used for the irrigation of the fields in their neighbourhood, either to expedite the transplantation of the winter rice seedings or to prevent them from withering during a break in the rains. In the Sadar subdivision, the main sources of irrigation are the same as in Madhubani, but the area irrigated is very much less. Most of the Madhubani streamlets have joined the larger rivers before they reach the Sadar, and the latter are too large to permit of their use for irrigation by the simple and inexpensive means adopted by the Madhubani cultivators. Tanks also are less numerous in the Sadar, and the raiyats being less familiar with irrigation than their fellows in Madhubani, make less use of such tanks as there are. Lastly, for the reasons already given, the Madhubani irrigation statistics are probably more complete than those of the Sadar, though it would be difficult to say to what extent this has affected them.

PAGE 90, PARA 327 :

While 85 per cent of the Madhubani irrigated area is under rice, there is practically no rice irrigation in Samastipur, the great majority of the irrigated area being under non-good crops, almost entirely opium and tobacco. In Madhubani, nearly one-fifth of the staple crop, rice, is ordinarily irrigated; in Benipatti Thana the proportion rises to over one-third. In Samastipur, irrigation is reserved for special and highly cultivated crops, covering an insignificant proportion of the cropped area. In Madhubani, irrigation is almost entirely practised on food crops, and the same is true of the Sadar, excluding Rusera Thana, where there is practically no irrigation at all. In Samastipur, on the other hand, almost all the irrigation is devoted to non-food crops.

PAGES 90-91, PARA 328 :

The Problem of Irrigation in Samastipur :—

The extension of irrigation in Darbhanga is thus by no means a simple question or one on which it would be advisable to generalise. In the south of the district, extensive irrigation is not practicable owing to

the scanty sources of supply, nor is it greatly required for the crops mainly grown. There is a prejudice against well-irrigation, which is probably to a certain extent well founded. It is believed that land once artificially irrigated must always be irrigated. In the prevailing soils of the area, irrigation forms a cust below the surface, which impairs the fertility of the land, unless irrigation is continued every year. Hence, irrigation is only practised on lands near wells, and these lands are reserved for the more valuable crops. The irrigation once begun must be continued, and though it may result in a good return through the production of more valuable crops than can be raised on unirrigated lands, it entails an amount of labour and expense from which the majority of cultivators are averse. No doubt the increasing pressure of the population on the soil will cause an extension of well-irrigated in this area, as it has already done in Saran and North Monghyr; but it is a matter which must be left in the hands of the cultivators themselves.

PAGE 91, PARA 329 :

The Sadar :—

In the Sadar subdivision little can be done in the way of extension of irrigation, owiug to the scanty sources of supply, and this is the more unfortunate, because it is this area, which, as a rule, suffers most severely in case of failure of the winter rice crop.

PAGES 97-98, PARA 350 :

Graphic Summary :—

The following table brings together in a concise form the information regarding the prevalence of different crops in different parts of the district, which has been discussed in the foregoing paragraphs. Only the more important crops are shown and fractions are omitted :—

Crop.	Percentage to net croped area in Subdivision.			Percentage to net cropped area in district as a whole.
	Madhubani.	Sadar.	Samastipur.	
Aghani rice ...	68	62	31	57
Bhadai rice ...	7	3	1	4
Total rice—	75	65	32	61

Miscellaneous food grains	21	19	19	20
Marua ...	13	13	12	13
Barley ...	8	10	9	9
Makai ...	—	4	14	5
Wheat ...	2	3	4	3
Gram ...	1	3	2	2
Miscellaneous food crops	2	1	7	3
Total food crops—	122	118	99	116

Non-food crops

Crop.	Percentage to net cropped area in Subdivision			Percentage to net cropped area in district as a whole.
	Madhubani.	Sadar.	Samastipur.	
Oilseeds ...	13	11	6	11
Miscellaneous non-food-crops	4	5	7	5
Indigo ...	1	2	8	3
Tobacco ...	1	1	6	2
Sugarcane ...	1	1	1	1
Total non-food crops...	20	20	28	22
Grand total cropped area	142	138	127	138
Twice cropped area	42	38	27	38
Net cropped area	100	100	100	100

IV

Statistical Estimate of the Material Condition of the Agricultural Classes

PAGE 122, PARA 440 :

The Causes of Famine in Bihar :—

It will be generally conceded that all famines in North Bihar which have been serious enough to require Government relief on a large scale, have been due to the failure of the winter rice crop. There is, it is believed, no instance in which Government has had to undertake relief, save in limited local areas, owing to failure of the crops of the bhadai

or rabi harvest, though, in the event of failure of winter rice crop conditions are of course relieved or aggravated according to the nautre of the preceding bhadai and the subsquent rabi harvest. Thus it is only to be expected that Darbhanga, which has large gross area and a large proportion of its cropped area under winter rice than any other district in North Bihar, should suffer most severely in the case of famine, and as a matter of fact, eight out of the ten thanas in district, or more than four-fifths of its total area, have been officially declared liable to serve distress in the event of a nauture of the winter rice crop. The statistics of the last great famine of 1897, further emphaize the importance of the winter rice crop in Darbhanga. The three districts of Saran, Darbhang and Muzaffarpur are practically on an equality, so far as the pressure of population and the soil and the small area available for extension of cultivation are concerned. But, as the following table shows the crop failure of 1896 affected them in different degrees of intensity :—

District.	Percentage of net cropped area under winter rice.	Highest number of persons relieved on any one day during the famine of 1897.	Percentage of pfsons relieved to total population affected by the crop failure.
Darbhanga	57.33	253,910	10.49
Muzaffarpur	42.35	139,355	6.93
Saran	29.11	85,173	5.75

PAGES 122-123, PARA 441 :

The Dependence of Darbhanga on winter rice :—

Though Saran has the greatest density of population to the square mile and the highest rent rate, it suffered least severely from famine, owing to the variety of its crops and the practically independence of many parts of it of the winter rice harvest. In Darbhanga on the other hand where in two subdivisions winter rice covers over three-fifths of the net crop area, more than a tenth of the population affected by its failure had to turn to Government for relief during the famine of 1897. There could be no more striking coroporation of the conclusion of the famine Commission that "the devastating famines to which the provinces of India have from time to time been liable are in all cases to be traced directly to the occurence seasons of unusual draught, the failure of the customary raifall leading to the failure of the food crops on which the population depend." And it might be added that in Bihar, famine, as distinct from local scar-

ies in
r than

a

nd, of
of verage
y n l that
whi es of
een gross
the
Gr 15-9,
of work
o from
pe his is
Rs. ng of
30
19 e aid
18 abour
12 after
36
50 30-6
23 f Rs.
16 nd of
18
8
80

91
70
42 hol-
13 such
20 other
29
15 mber
urns,
nily"
ation
ly. This an
ntry
Rs.
Mr.
also
" so

or rabi harvest, though, in the event of failure of winter rice crop conditions are of course relieved or aggravated according to the nautre of the preceding bhadai and the subsquent rabi harvest. Thus it is only to be expected that Darbhanga, which has large gross area and a large proportion of its cropped area under winter rice than any other district in North Bihar, should suffer most severely in the case of famine, and as a matter of fact, eight out of the ten thanas in district, or more than four-fifths of its total area, have been officially declared liable to serve distress in the event of a nauture of the winter rice crop. The statistics of the last great famine of 1897, further emphaize the importance of the winter rice crop in Darbhanga. The three districts of Saran, Darbhang and Muzaffarpur are practically on an equality, so far as the pressure of population and the soil and the small area available for extension of cultivation are concerned. But, as the following table shows the crop failure of 1896 affected them in different degrees of intensity :—

District.	Percentage of net cropped area under winter rice.	Highest number of persons relieved on any one day during the famine of 1897.	Percentage of pfsons relieved to total population affected by the crop failure.
Darbhanga	57.33	253,910	10.49
Muzaffarpur	42.35	139,355	6.93
Saran	29.11	85,173	5.75

PAGES 122-123, PARA 441 :

The Dependence of Darbhanga on winter rice :—

Though Saran has the greatest density of population to the square mile and the highest rent rate, it suffered least severely from famine, owing to the variety of its crops and the practically independence of many parts of it of the winter rice harvest. In Darbhanga on the other hand where in two subdivisions winter rice covers over three-fifths of the net crop area, more than a tenth of the population affected by its failure had to turn to Government for relief during the famine of 1897. There could be no more striking coroporation of the conclusion of the famine Commission that "the devastating famines to which the provinces of India have from time to time been liable are in all cases to be traced directly to the occurence seasons of unusual draught, the failure of the customary raifall leading to the failure of the food crops on which the population depend." And it might be added that in Bihar, famine, as distinct from local scar-

PAGE 123, PARA 442 :

district, at least four-fifths of the inhabitants of Darbhanga, and probably more, are entirely dependent on agri-
ns of the statistics discussed in the preceding chapter, to form an estimate of the material condition of this vast
they derive in ordinary years from cultivation. In the note appended to this chapter, the average outturn value to
scussed, and taken these figures as a basis, the gross annual value of the produce of the district and the net profit

value erage urn cre.		Total gross value of outturn.			Cost of cultivation per acre.			Total cost of cultivation.			Net profit per acre.			Total net profit to cultivator.		
s.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs	As.	P.
3	6	21,22,080	13	6	12	13	6	8,83,662	13	6	18	0	0	12,38,418	0	0
8	0	16,93,809	0	0	6	14	0	5,97,176	4	0	12	10	0	10,96,632	12	0
0	0	39,64,878	0	0	29	0	0	19,82,439	0	0	9	0	0	19,82,439	0	0
8	0	2,15,850	0	0	6	0	0	1,03,608	0	0	6	8	0	1,12,242	0	0
2	0	3,56,55,070	8	0	15	8	0	15,038,193	0	0	2	4	0	2,06,16,877	8	0
0	0	18,28,350	0	0	12	8	0	4,57,087	8	0	37	8	0	13,71,262	8	0
2	0	12,55,923	12	0	11	0	0	5,81,691	0	0	12	12	0	6,74,232	12	0
0	0	25,35,445	8	0	6	0	0	9,15,048	0	0	10	10	0	16,20,397	8	0
0	0	6,41,430	0	0	5	8	0	1,95,992	8	0	12	8	0	4,45,437	8	0
0	0	57,70,278	0	0	6	0	0	19,23,426	0	0	12	0	0	38,46,852	0	0
0	0	97,440	0	0	25	0	0	30,450	0	0	55	0	0	66,990	0	0
.		5,57,80,555	9	6				22,708,774	1	6		...		3,30,71,181	8	0
4	0	14,97,470	10	0		0	0	10,59,435	0	0	26	14	0	4,38,035	10	0
	0	20,16,490	0	0	20	2	0	5,76,140	0	0	50	0	0	14,40,350	0	0
	0	1,00,926	0	0	13	0	0	31,239	0	0	29	0	0	69,687	0	0
	0	37,143	6	0	3	14	0	10,373	6	0	10	0	0	26,770	0	0
	0	27,07,700	0	0	3	7	0	4,65,392	13	0	16	9	0	22,42,347	3	0
	0	12,38,357	4	0	6	0	0	2,54,022	0	0	23	4	0	9,84,335	4	0
	0	7,85,865	0	0	5	0	0	2,61,955	0	0	10	0	0	1,00,000*	0	0
		...	...			...		...			5	0	0	4,38,065	0	0
		83,83,992	4	0		...		26,58,557	3	0		...		57,39,590	1	0
		6,4',64,547	13	6		...		2,53,67,331	4	6		...		3,88,11,371	9	0

quarters of the indigo is grown by the manufacturer himself.

city is always due to the failure of the winter rice crop, and varies in its effect upon a given area with the importance of the crops other than the winter rice one which the cultivators can fall back.

PAGES 123-124, PARA 443:

Acreage averages.

The area figures have been taken from the crop statement and, of course, include the twice cropped lands. In order to ascertain the average value of the outturn per acre, these must be excluded. We thus find that the gross annual value of the produce of the 16,92,443 acres of cultivated area in the district is Rs. 64,164,547. This gives the gross average value of the produce per acre as Rs. 37-14. Similarly the gross average cost of cultivation per cultivated acre comes to Rs. 14-15-9, but this would only be paid in cash if the cultivator did no field work himself, but employed hired labour for all agricultural operations from ploughing to reaping. It need hardly be said that such a case as this is seldom if ever, found. The ordinary small cultivator, with a holding of less than five acres does at least half the field work himseif with the aid of his family, and his actual disbursements for the hire of outside labour cannot be put higher than Rs. 7-8 an acre. Such a cultivator then, after paying for tht cost of cultivation, would have a net profit left of Rs. 30-6 per acre. Deducting from this his rent, at the average district rate of Rs. 3-12-6 per acre we find that the net return to the cultivator at the end of an ordinary year works out to Rs. 26-9-6 or say Rs. 26-8 per acre.

PAGE 124, PARA 444:

The Cost of Living :—

We are now in a position to estimate the minimum size of a holding, capable of supporting a pure cultivator and his family in such moderate comfort, as to relieve them of the necessity of working for other cultivators or seeking other means of employmant. The average number of persons persons per family can be obtained from the Census Returns, where each house defined as the "residence of of a commensal family" was separately enumerated. It appears that in 1901, the village population numbered 28,09,219 persons and occupied 555.596 houses. This gives an average of almost exactly five persons per family. Now for the peasantry of North Bihar the cost of living in moderate comfort may be put at Rs. 15 per head per annum. This is the estimate worked out in detail by Mr. Stevenson-Moore in his report on the Narhan operations, and it has also been adopted by Dr. Grierson previously in his "Notes on Gaya" so

that a Darbhanga family requires a net income of Rs. 75 per annum to maintain itself in a moderate degree of comfort.

PAGE 124, PARA 445:

The Subsistence Holding :—

We have seen that a family of cultivators, who do half the cultivation work themselves, can make a profit in an ordinary year after payment of rent of Rs. 26-8 per acre so that a family of this kind with a holding of three acres would make a net profit of Rs. 79-8 per annum, and would thus have a small margin of four or five rupees over the sum absolutely necessary for its maintenance. But, as a matter of fact, a family with such a small holding as this would do practically the whole of the cultivation themselves, and their only necessary outgoings would be the rent and the cost of seed and possibly the occasional hire of a plough and a pair of bullocks. The net profits of such a family would be well over Rs. 30 an acre and they could consequently earn Rs. 75 necessary for their subsistence from a holding of 2½ acres. This I think may be taken as the size of the subsistence holding for a family of pure cultivators in Darbhanga. For a family with such a holding, by dispensing with outside labour, could, in an ordinary year, earn just sufficient to keep themselves. On the other hand, a family with a holding af less than 2½ acres would not be pure cultivators. They could not earn from the holding sufficient to keep themselves in moderate comfort, and would have to supplement their income by working for other cultivators or resorting to other sources of employment.

PAGE 124, PARA 446:

The Agricultural Population of the District :—

In order to come to a conclusion as to the material condition of the agricultural classes of Darbhanga, it is necessary to ascertain what proportion of the population have holdings above or below the subsistence limit of 2½ acres. Here the record-of-rights does not help us, because it treats as a separate holding each parcel of land held under a separate proprietor, and in many parts of Darbhanga where extreme subdivision of proprietary rights is found, it is the rule rather than exception for each family to hold two or more of such parcels. But an approximate estimate can be obtaided from the cesus returns, which divide the agricultural population of the district as follows:—

	Number.	Percentage of total population.
Rent Payers	1,739,360	60

Labourers ...	494,033	17
Rent-receivers	34,195	1
Miscellaneous (pasture and supervision)	41,141	1
Engaged on other occupation but partially dependent on agriculture ...	23,882	1
Total—	2,332,611	80

PAGE 125, PARA 447 :

The average size of Raiyati Holdings :—

Now the rent-payers, the miscellaneous agriculturists and the persons engaged in other occupations, may be grouped together as pure cultivators, because, they have been shown in the chapter on population, it is very probable that many persons, whose real occupation is agriculture, returned themselves at the census under their hereditary caste occupations. This gives a total of 1,804,383 pure cultivators or 360,876 families. The total area in the occupation of raiyats (including small rent free holders) is 15,79,445 acres, but some of this should probably be allotted to the labourers. An allowance of 2½ acres per labouring family or half an acre per head will be ample on this score, as persons with a larger holding than this would almost certainly have been returned as rent-payers. After making this deduction of 2,17,016 acres from the total raiyati area we were left with 13,32,429 acres to divide among the 3,60,876 families of pure cultivators. This gives an average of 3.6 acres per family or more than an acre in excess of the subsistence holding. Even allowing for the fact that about 9 per cent of the raiyati area is uncultivated (though this uncultivated area is not entirely unproductive), the average family of pure cultivators in the Darbhanga District, forming over three-fifths of the total population, should enjoy a moderate degree of comfort, and should be able to save sufficient in ordinary years to tide them over an occasional season of short crops.

PAGE 125, PARA 448 :

The Capabilities of the District in withstanding Crop Failure :—

As a matter of fact, the cultivators of Darbhanga can and do weather more than one season of crop failure without turning to Government for relief. It is a common proverb that it takes three bad years to make a famine. Even in the great famine of 1897, which followed two seasons of bad harvests and was accompanied by a higher range of prices than had been known since the previous famine of 1873-74, the proportion of pure cultivators who had to seek relief at the hands of Government

must have been very small. For the total number relieved, when the distress was at its height, was only 10 per cent, of the total population affected, or little more than half of those who are classed in the census returns as labourers, and who have either no land at all, or whose holdings are too small to support them from the profits of cultivation in an ordinary year, so that they have to make out their income by working for others. This class can only just make both ends meet in an ordinary year, and consequently has no reserves to fall back on in a bad year. A large part of it must perforce, therefore, turn to Government for relief after a serious crop failure, particularly when that is caused by drought, and produces a diminution of the demand for field labour, which is its main source of support. And it speaks well for the staying powers of the district, that a large minority even of the labouring class were able to dispense with Government relief during the last famine.

PAGE 125, PARA 449 :

The Position of Pure Cultivators :—

The famine statistics thus corroborate the contention that the average size of the pure cultivator's holding is well above the subsistence limit, and that the pure cultivators have a reserve, on which to fall back, in years of scarcity, and do not live a mere hand to mouth existence. But this does not imply that the district, under present agricultural population without a material reduction of the standard of comfort. As we have seen, 80 per cent of the district area is under cultivation. The area still available for cultivation is only 10 per cent, of the total, and it is not probable that the cultivated area could be materially increased, having regard to grazing requirements. It may be assumed, therefore, that little relief is to be anticipated from extension of cultivation in the district, and it will be of interest to estimate the income under present conditions of the agricultural population, including both cultivators and labourers.

PAGES 125-126, PARA 450 :

The Sources of Income of Cultivators and Labourers :—

Excluding the rent-receivers, the cultivators and labourers number just under 2,300,000 persons, or over four-fifths of the total population of the district. They hold an area of 15,79,445 acres, of which over 90 per cent is cultivated and fully productive. The remainder is not entirely unproductive, as a good deal consists of orchards and the like, but such profits as are derived from it, may be set off against the cost of maintenance of cattle and the purchase of implements. There is a further area of 2,58,276 acres in the cultivation of landlords, which gives employment

to a certain number of labourers, though the raiyats derive no benefit from it at all. The cost of cultivation was found above to be Rs. 15 an acre, but as a large proportion of the landlords, who have lands in their own cultivation, are petty and resident, and do a good deal of field work themselves, it may fairly be assumed that not more than Rs. 7-8 per acre goes to the labourers employed on the cultivation of the landlords' lands.

PAGE 126, Para 451 :

Their Net Income :—

On the foregoing, then, is based the following estimate of the sum available in an ordinary year for distribution among the 2,300,000 cultivators and labourers constituting the agricultural population of the district :—

		Rs.
Gross value of the produce of 14,21,500 acres or 90 per cent of the raiyati area, at Rs. 37-14 per acre	...	53,839,312
Earnings of labourers employed in the cultivation of landlord's lands, 258,276 acres at Rs. 7-8 per acre	...	1,937,070
	Total—	55,776,382
Deduct rental-cash :—		5,371,582
Produce :—		757,116
	Total—	6,128,698
Net amount available for distribution among cultivators and labourers	...	49, 647,684

PAGE 126, PARA 452 :

Income per head :—

This gives an average income of Rs. 21-8 per head of the agricultural population. Similar calculations in Saran gave an average income of Rs. 18-8 per head, so the reserve in Darbhanga is evidently larger, but as Rs. 15 per annum is the minimum income required to maintain an individual in moderate comfort, a considerable portion of the population of both districts must, in an ordinary year, earn little more than the minimum, and any serious increase in their numbers, or a bad year, must inevitably be followed by a reduction in the standard of comfort.

PAGES 126-127, PARA 625 :

Indebtedness :—

An other matter of interest in regard to the material condition of

the agricultural community, is the question of their indebtedness. The transfer statistics discussed in the preceding chapter, show that only a little over 6 per cent of the raiyat holdings and only 2½ per cent of the raiyati area are affected in whole or in part by sales or mortgages possession. The total amount of recorded indebtedness is under eight lakhs, as compared with 50 lakhs in Saran. The transfer statistics do not show cases In which the land is mortgaged as security for a loan, but possession is retained by the borrower, nor do they disclose amount borrowed on security other than the land. But loans of the first kind are usually only made to persons whose credit is otherwise good, as the fear of a previous mortgage ordinarily deters lenders from advancing money on the security of the land without obtaining possession. As to loans of the second kind, the land is the raiyat's chief source af credit, and only petty loans of a floating and temporary nature are made on other security. It is satisfactory, thereforc, to find that so small a proportion of the raiyats are indebted to such an extent, that they have had to part with their holdings or portions of them in order to borrow money, and that the total amount of indebtedness incurred in this way is less than one-sixtieth of the share of the gross annual produce secured by the cultivating classes. The indebtedness of the Darbhanga agricultural community cannot, therefore, be said to be a very serious matter, and in this respect the district is certainly better off than Saran where the total recorded indebtedness incurred by mortgages with possession was half a crore of rupees or nearly one-seventh of the share of the gross annual produce secured by the cultivating classes.

PAGE 128, PARA 458:

The Annual District Balance Sheet:—

The balance of food-grains in favour of the district in an ordinary year may thus be calculated as follows :—

			Tons.	Tons.
Total produce of the district—				
27,160,762 maunds	...	...	...	993,686
Deduct—				...
Food consumption	...		732,238	
Seed-grain	...		40,000	772,238
			———	———
Normal surplus of food-grain—				221,445

PAGE 128, PARA 460 :

Emigration from the District :—

The foregoing discussion points to the conclusion that, on the whole, the pressure of the population on the soil is less felt in ordinary years in Darbhanga than either in Muzaffarpur or Saran, and this is corroborated by the fact that emigration from Darbhanga is much less than from either of the other districts. The census figures show that such emigration as there is from Darbhanga is almost counter-balanced by immigration from its western neighbours, both of which show at once a larger number of emigrants and a smaller number of immigrants than Darbhanga. The remittances made by money-order into the Darbhanga district are less than one-third of those received by Saran. But though the pressure on the soil has not yet driven the population to resort to emigration to any great extent, the indications are that the limits of expansion are being rapidly reached. The facts, thai in the south of the district the population is now practically stationary and that in the norh its advance has received a significant check, while there is practically no room for extension of cultivation, all point to the conclusion that the district will at no distant date reach a point, when it will no longer be able to support an increase in its population from the produce of the soil, without either a reduction in the standard of comfort or an increase in productive capicity. Saran has already reached such a point, and is avoiding or minimising a reduction in the standard of comfort by resort to emigration, and also by higher and more careful cultivation. There is, no doubt, some room for improvement in the latter respect in Darbhanga also, for hardworking as the Darbhanga cultivator is, it cannot be said that he is so skilful and adroit as his Saran neighbour. On the other hand, it must be remembered that Darbhanga is mainly a one-crop district and can never hope to rival Saran in the richness and variety of its products.
